Claims

1. (Original) A method of converting a respirator mask from a first type of body seal to a second type of body seal, wherein the respirator mask has a facial lens, the lens having a perimeter sealing edge extending around the lens, the method comprising:

releasing a seal between the perimeter sealing edge of the lens and a lens opening on the first type of body seal;

removing the lens from the lens opening on the first type of body seal;

aligning the lens within a lens opening on the second type of body seal; and

forming a seal between the perimeter sealing edge of the lens and the lens opening of the second type of body seal.

2. (Original) The method of claim 1 wherein the first type of body seal is selected from the group consisting of a full facepiece seal, a respirator hood, and a full body respirator suit.

3. (Original) The method of claim 2 wherein the second type of body seal is selected from the group consisting of a full facepiece seal, a respirator hood, and a full body respirator suit.

4. (Original) The method of claim 1 wherein the respirator mask has a clamp element for urging opposed rim portions of the perimeter sealing edge of the lens and the lens opening of the first type of body seal together, and wherein the releasing step comprises:

loosening the clamp element.

5. (Original) The method of claim 4 wherein the loosening step comprises:

separating opposed threaded fasteners of the clamp element.

6. (Original) The method of claim 4 wherein the loosening step comprises:

elastically disengaging the clamp element from the respirator mask.

7. (Original) The method of claim 4 wherein the loosening step comprises:

releasing a latch mechanism of the clamp element.

8. (Original) The method of claim 4 wherein the loosening step requires no tools.

9. (Original) The method of claim 4 wherein one or both of the opposed rim portions include microstructured sealing surfaces.

10. (Original) The method of claim 4 wherein the opposed rim portions include cooperative mechanical engagement surfaces.

11. (Original) A method for converting a respirator mask from a full facepiece respirator to a hood respirator, wherein the respirator mask has a facial lens, the lens having a perimeter sealing edge extending around the lens, the method comprising:

releasing a seal on the full facepiece respirator from sealed engagement to the facial lens of the mask about the perimeter sealing edge thereof;

removing the lens from the full facepiece respirator;

aligning a lens opening of a hood respirator in sealed engagement with the perimeter sealing edge of the mask; and

sealably affixing the lens opening of the hood respirator to the perimeter sealing edge of the mask.

12. (Original) A hood respirator comprising:

a shroud having a head-covering portion which has a lens opening therein, and a body sealing portion configured for forming a seal with a wearer's neck, shoulders or other body surfaces;

a facial lens having a perimeter sealing edge extending around the lens;

a disengageable coupling between the lens opening of the shroud and the perimeter sealing edge of the lens, the coupling having a first engaged condition wherein the lens is sealably affixed to the shroud and a second released condition wherein the lens is removable from the shroud; and

a breathable gas delivery conduit fluidly coupled to the hood.

13. (Original) The hood respirator of claim 12 wherein the perimeter sealing edge is an integral, peripheral edge of the lens.

14. (Original) The hood respirator of claim 12 and furthering comprising:

a lens frame disposed around the facial lens, wherein the perimeter sealing edge is a peripheral edge of the lens frame.

15. (Previously Amended) The hood respirator of claim 12 wherein the perimeter sealing edge of said facial lens and the lens opening have opposed rim portions and wherein the disengageable coupling is selected from the group consisting of opposed threaded members, an elastic band at least partially extending along the opposed rim portions, and a latch mechanism.

16. (Previously Amended) The hood respirator of claim 12 wherein the perimeter sealing edge of said facial lens and the lens opening have opposed rim portions and wherein one or both of the opposed rim portions include microstructured sealing surfaces.

17. (Previously Amended) The hood respirator of claim 12 wherein the perimeter sealing edge of said facial lens and the lens opening have opposed rim portions and wherein the opposed rim portions include cooperative mechanical engagement surfaces.

18. (Original) The hood respirator of claim 12, and further comprising:

a full facepiece seal connected to the lens wherein the shroud is superpositioned over the full facepiece seal through the disengageable coupling between the lens opening of the shroud and the perimeter sealing edge extending around the lens.

19. (Original) The hood respirator of claim 12 wherein the breathable gas delivery conduit communicates fluidly with the hood through the shroud.

20. (Original) The hood respirator of claim 12 wherein the breathable gas delivery conduit communicates fluidly with the hood through the lens.

21. (Original) A hood respirator comprising:

a shroud having a head-covering portion having a front opening therein, and a body sealing portion configured for forming a substantially seal with a wearer's neck, shoulders or other body surfaces;

a respirator mask having a facial lens, a perimeter sealing edge around the mask, and a breathable gas delivery conduit; and

a disengageable coupling between the front opening of the shroud and the perimeter sealing edge of mask, the coupling having a first engaged condition wherein the mask is sealably affixed to the shroud and a second released condition wherein the mask is removable from the shroud.

22. (Original) The hood respirator of claim 21 wherein the breathable gas delivery conduit is connected to the mask through the lens.

23. (Original) The hood respirator of claim 21 wherein the respirator mask has a full facepiece seal, and wherein the shroud is superpositioned over the full facepiece seal through the disengageable coupling between the mask opening of the shroud and the perimeter sealing edge around the mask.

24. (Original) The hood respirator of claim 23 wherein the full facepiece seal is detachable from the respirator mask.

25. (Original) The hood respirator of claim 21, and further comprising:

a harness attached to the respirator mask, with the harness being adapted for securing the respirator mask over a human face.

26. (Original) The hood respirator of claim 21 wherein the respirator mask has a nose cup.

27. (Original) The hood respirator of claim 26 wherein the nose cup is detachable from the respirator mask.

28. (Original) The hood respirator of claim 26, and further comprising:

a fastener attached to the hood, with the fastener being suitable for securing the nose cup over a human nose or mouth and capable of being tightened or loosened from the outside of the hood.

29. (Previously Amended) A respiratory kit comprising:

a plurality of body seals comprising at least a first type of body seal and a second type of body seal, each body seal having a lens opening defined therein;

at least one facial lens, interchangeable with at least one of the plurality of body seals, having a perimeter sealing edge around the lens, the lens capable of being selectively removably coupled with each body seal along the perimeter sealing edge of the lens and the lens opening on the body seal wherein, when so coupled, a seal is defined between the body seal and the lens; and

a breathable gas delivery conduit capable of being fluidly coupled to each of the body seals or the lens.

30. (Original) The respiratory kit of claim 29 wherein each of the first and the second types of body seals is selected from the group consisting of a full facepiece seal, a respirator hood, and a full body respirator suit.

31. (Original) The respiratory kit of claim 29 wherein the first type of body seal is a full facepiece seal capable of forming a seal with a human face.

32. (Original) The respiratory kit of claim 31 wherein the second type of body seal is selected from the group consisting of a respirator hood and a full body respirator suit.

33. (Original) The respiratory kit of claim 29 and further comprising:

a coupling adapted to urge opposed rim portions of the perimeter sealing edge on the lens and the lens opening together.

34. (Original) The respiratory kit of claim 33 wherein one or both of the opposed rim portions include microstructured sealing surfaces.

35. (Original) The respiratory kit of claim 33 wherein the opposed rim portions include cooperative mechanical engagement surfaces.

36. (Original) The respiratory kit of claim 29 wherein the breathable gas delivery conduit is configured for communicating fluidly with each type of body seal through a portion thereof.

37. (Original) The respiratory kit of claim 29 wherein the breathable gas delivery conduit is configured for communicating fluidly with the lens.

38. (Previously Amended) A respiratory kit comprising:

at least one respirator hood, with each hood having a mask opening defined therein;

at least one respirator mask, interchangeable with at least one of the at least one respirator hood, having a facial lens, a full facepiece seal coupled with the lens, and a perimeter sealing edge around the mask, wherein the mask is capable of being selectively removably coupled with each hood along the perimeter sealing edge of the mask and the mask opening on the hood wherein, when so coupled, the hood is superpositioned over the full facepiece seal and a seal is defined between the hood and the mask; and

a breathable gas delivery conduit capable of being fluidly coupled to the mask or the hood.

39. (Original) The respiratory kit of claim 38 wherein the full facepiece seal is removable from the mask.

40. (Original) The respiratory kit of claim 38 wherein the hood is a full body respirator suit.

41. (Original) The respiratory kit of claim 38 wherein the breathable gas delivery conduit is configured for fluidly communicating with the mask through the lens.